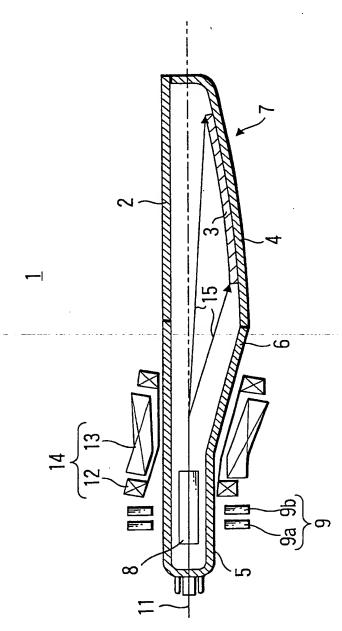
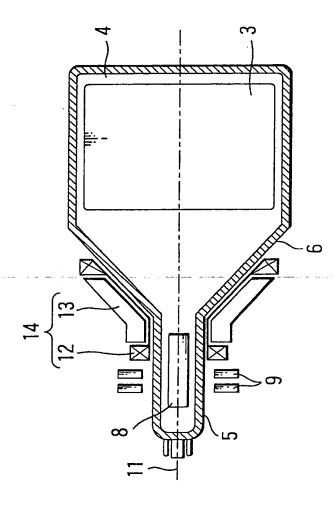


**F/G. 1** (PRIOR ART)



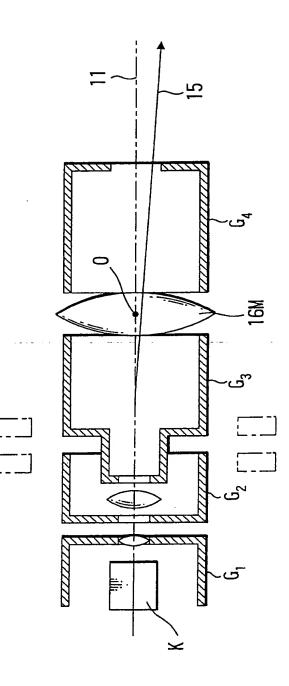


F/G. 2 (PRIOR ART)



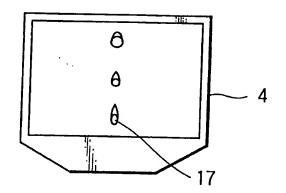


*F/G. 3* (PRIOR ART)

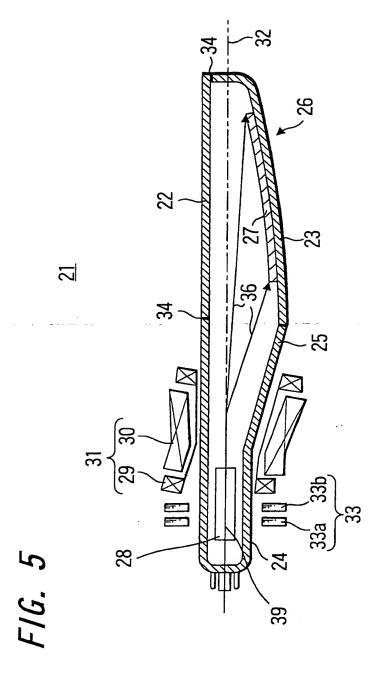


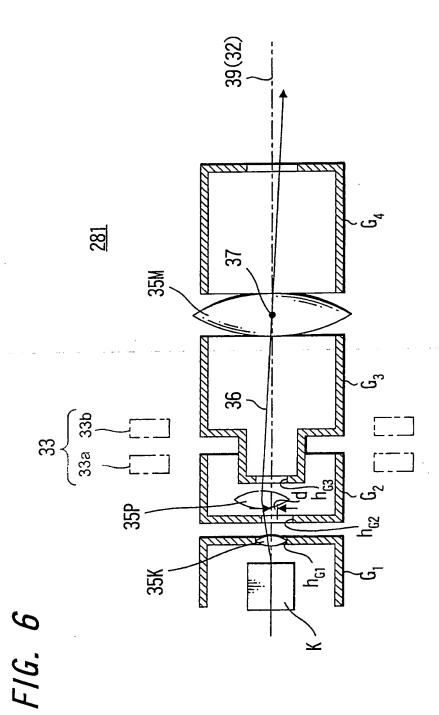


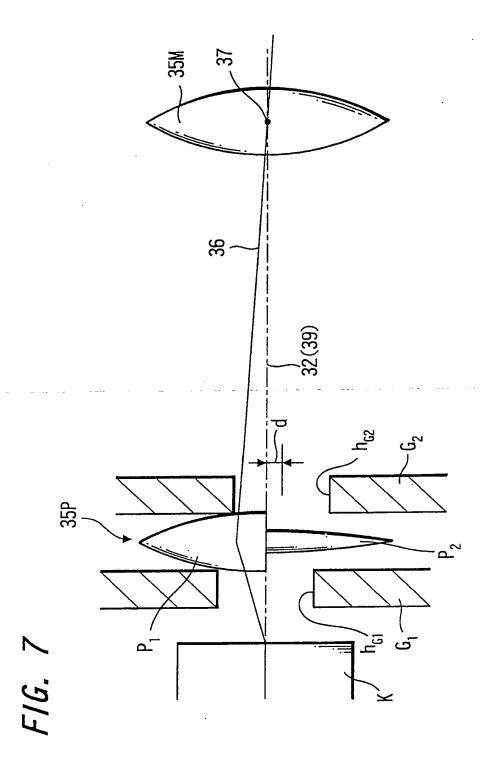
F/G. 4 (PRIOR ART)



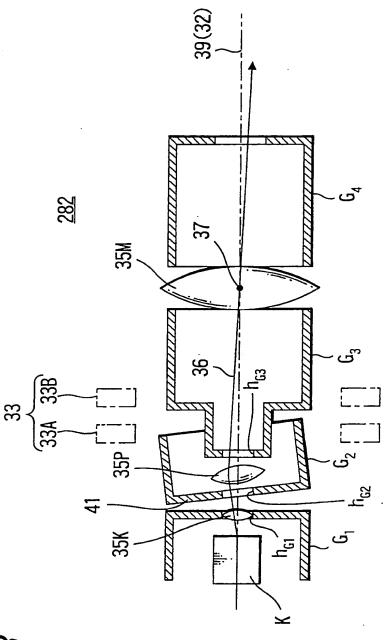






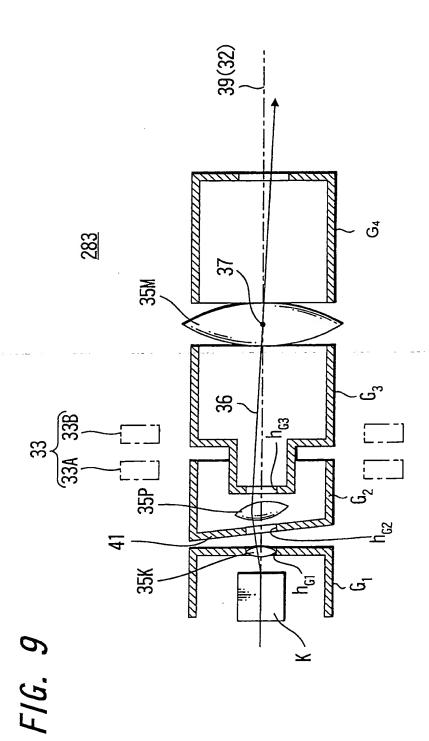




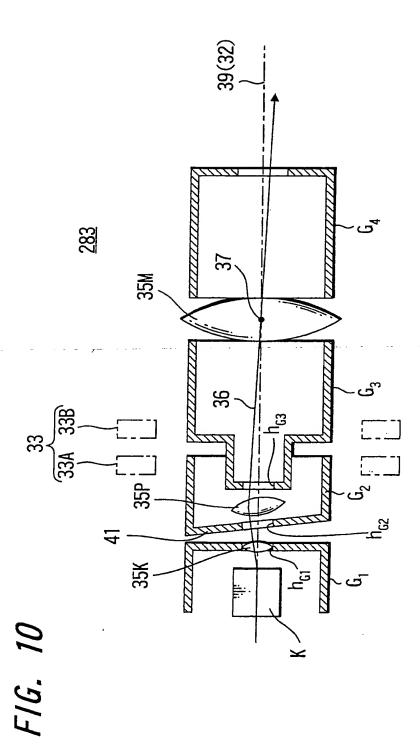


F16. 8

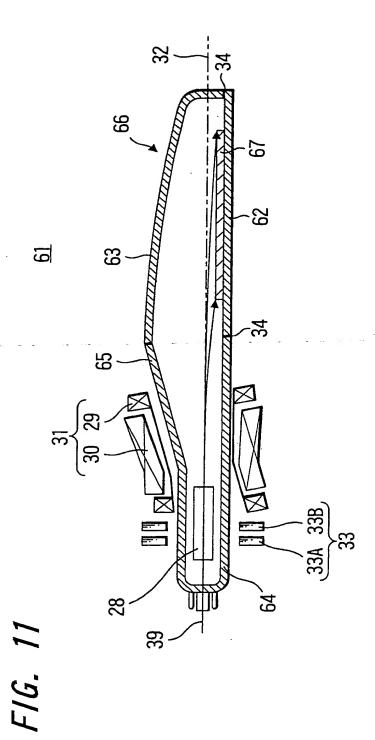




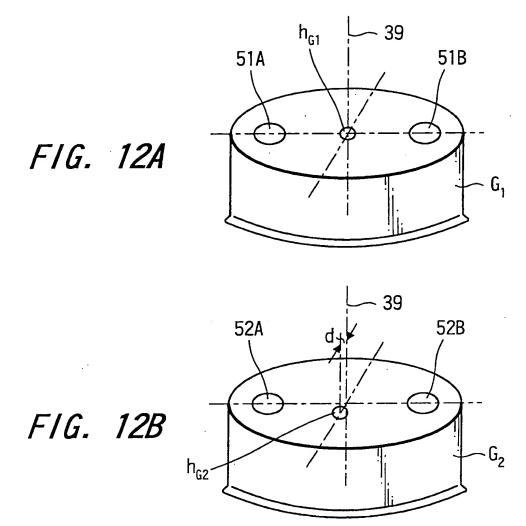






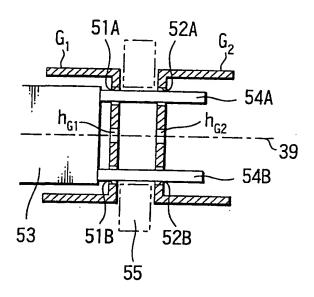




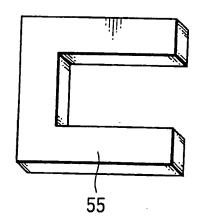




F/G. 13



F/G. 14





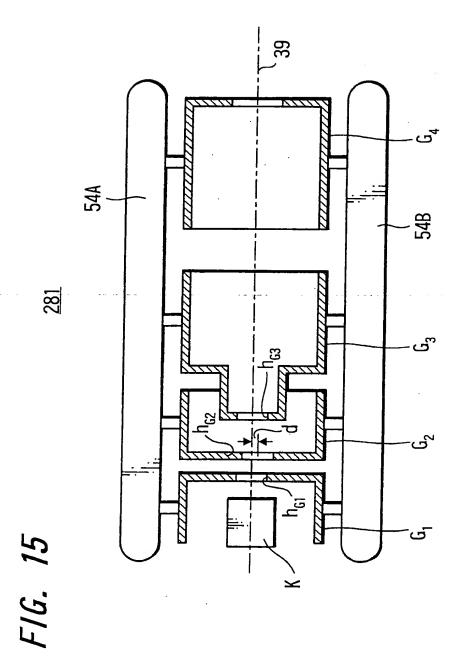
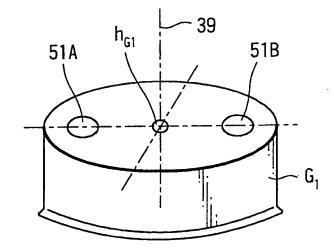
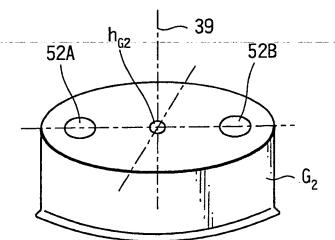




FIG. 16A

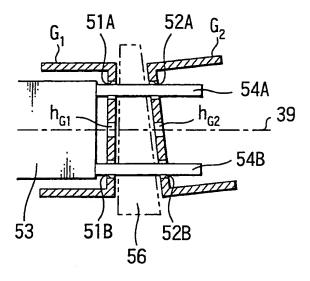




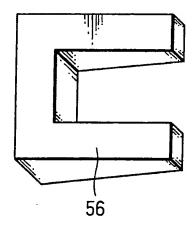
F/G. 16B

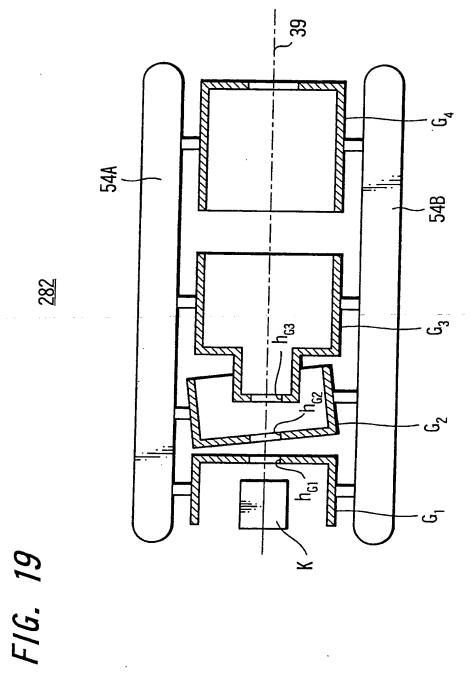


F/G. 17



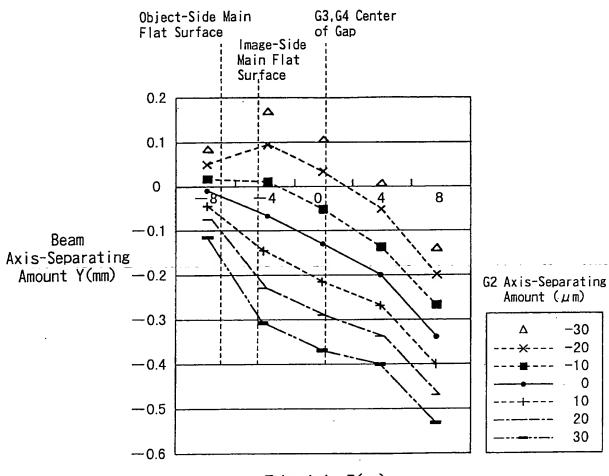
F/G. 18







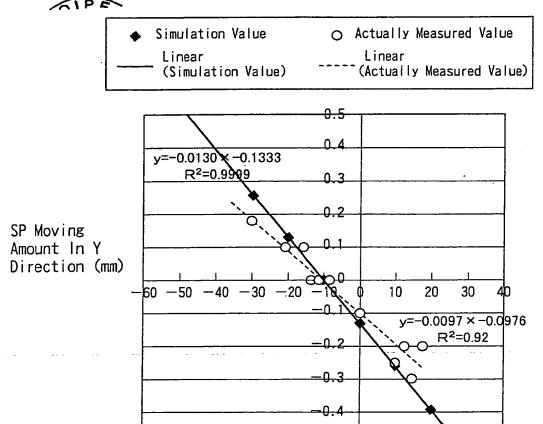
## FIG. 20



Tube Axis Z(mm)

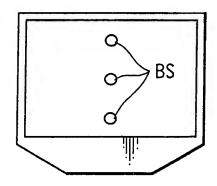
OCT 2 0 2003 W

G2 Axis-Separating Amount VS SP Moving Amount (Including Effect of Magnetic Field of Centering Magnet)



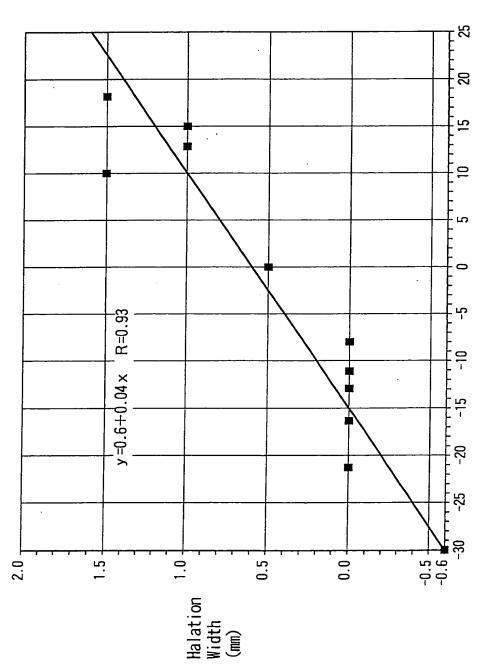
Axis-Separation In G2Y Direction ( $\mu$ m)

## FIG. 22





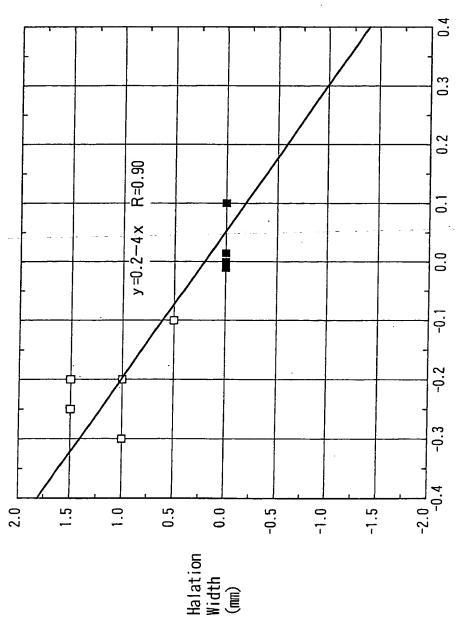




G2 Hole Axis-Separating Amount ( $\mu$ m)



F16. 24



□ G2 Hole Position +15 $\mu$ m G2 Hole Position -15 $\mu$ m

Spot Moving Amount (mm)





